



## ASSEMBLY PLANT FOR FILLING VALVES

- Fully automatic assembly of filling valves
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- The product is composed of 17 individual parts



# ASSEMBLY PLANT FOR FILLING VALVES



mkf realized the fully automatic assembly of filling valves for WC cisterns for Sanitärtechnik Eisenberg GmbH (SANIT). The product consists of a total of 14 individual plastic parts. All individual parts are separated from loose material by means of bunker belts, circular conveyors and linear conveyors, aligned and automatically fed to the assembly line. All components are then assembled in a few seconds, inspected, labeled by laser and finally placed in containers in the correct position. The system has a total of 17 assembly and processing stations for this purpose.

## PROJECT WORKFLOW: STEP BY STEP TO THE GOAL

1. Concept development in consultation with the customer
2. Active support in product development with regard to automation and assembly capability
3. Preparation of a specification sheet in cooperation with the customer
4. Determination of costs, budget and realization time
5. Preparation of offer by mkf and order by the customer
6. Realization in constant consultation: design meetings, design acceptance, project meetings, status meetings and milestone control, pre-acceptance
7. Installation and commissioning of the pre-accepted equipment at the customer's site
8. Final acceptance by the customer
9. After sales service: Conclusion of maintenance and optimization contracts

## CUSTOMER BENEFIT: MODULAR PLANT CONCEPT FOR COST-EFFICIENT EXPANSION AND RETROFITTING

The core requirement for the system concept was error-free handling of the various plastic parts. These are characterized by high tolerances due to their production and shape - unfavorable for the assembly and automation capability of the filling valves. For this purpose, mkf developed innovative alignment, centering and positioning units so that the assembly process reacts smoothly to the high tolerances of the different plastic parts. In addition, the system and its control system have a modular basic design. This allows SANIT to cost-effectively expand and retrofit the system as well as easily replace the modules. The result is a flexible assembly process. The customer-specific changeover to other automation processes is carried out in just a few simple steps.

